

Nomophobia In The School Environment In Côte D'ivoire: The Case Of The 'École Des Familles'.

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Abstract:

The aim of this study was to verify the existence of nomophobia in schools in Côte d'Ivoire. To this end, we conducted an anonymous questionnaire survey of 95 smartphone-using students, including 50 girls and 45 boys from 'École des familles'. Data from a descriptive analysis were processed by flat sorting using Excel 2016. The results show that 95.79% use their mobile phone at home, compared with 4.21% who use it elsewhere. 5.26%, all boys, have already had their mobile phone withdrawn by their parents, while 94.74% have been threatened with withdrawal for excessive attachment or loss of time. As a result, 92.63% live in fear of withdrawal. Of these, 35.23% have an excessive fear of being separated from their mobile phone. They are therefore nomophobic.

The study also reveals that in their free time, respondents use their mobile to chat with friends (24.21%), play online video games (36.84%) and on social networks (38.95%). Also, if their mobile phone were taken away, respondents would be angry (13.68%), very angry (38.95%), ready to harm the parent who had taken away their mobile phone (2.11%) or prefer to die (3.16%), while 42.11% said they did not know how they would react.

Also, in terms of gender, girls are more addicted to mobile phones (50.53%) than boys (45.26%). As a result, they are more likely to be threatened (52.63%) than boys (42.11%). Our results confirm the existence of nomophobia in schools in Côte d'Ivoire, with a prevalence rate of 35.23%.

Key words: nomophobia, school environment, , Côte d'Ivoire.

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I. INTRODUCTION AND SITUATION OF THE RESEARCH PROBLEM :

Emerging in the second half of the 1990s in Asia, more specifically in Japan and South Korea, **nomophobia or mob dependence** is part of the large family of cyber addiction. These psycho-communicational disorders were first seen in the United States of America and Europe, particularly in France, before making their mark in Africa, particularly in Côte d'Ivoire (Koffi, V. A., Konan, S. D., Koffi, E. M. & Alla G. L. (2019; Aka, K. G. & Effe, J. 2020). It is manifested by an obsession with using mobile phones excessively and uncontrollably.

Nomophobia is a universal phenomenon that is attracting the interest of many researchers. For example, in Haute-Normandie (France), **Tovolaci, M. & all (2015 sent a questionnaire to** 760 students with an average age of 20. The results showed that 79.6% of these students owned a smartphone, 12.3% of respondents admitted to having been woken up several times by their mobiles in one month, 13.6% expressed the need to feel contactable 24/7. This stressful desire to be contactable was expressed by 11.3% of respondents, 31.3% became anxious if their mobile phone was unavailable for 24 hours, and 30.4% admitted to spending too much time on their mobile, etc.

The authors point out that: (1) almost a third of schoolchildren suffer from nomophobia; (2) women are at the frontline of this disorder; (3) nomophobia is associated with cyber addiction and sleep problems.

As if to complement the study conducted in France, in the United States of America, Richard, M. & Cheever, N. A. (2008) looked at the link between academic performance, anxiety and satisfaction, and obsessive mobile phone use among students at the University of Southern California in the United States of America, more specifically in Los Angeles.

Their results show that this pathology negatively affects the victims' academic performance, while creating anxiety and a relatively low level of life satisfaction. By way of treatment, these authors recommend that victims become aware of these dangers and limit their use of mobile phones.

Still in the United States of America, specifically in Ohio, USA, Elhai, et al. (2017) sought to understand the manifestations of nomophobia through a systematic review of the literature on uncontrolled

smartphone use. Their results showed that immoderate smartphone use is associated with an increase in anxiety and depression symptoms, just as anxiety and depression can also lead to excessive smartphone use.

To treat this condition, Elhai et al. suggest that researchers and clinicians should be aware that problematic smartphone use is a potential risk factor for anxiety and depression. This is why clinicians need to focus their interventions on finding solutions related to immoderate phone use, so as not to stray towards other false diagnoses, for the greater good of patients of this type.

In the same spirit of looking after the welfare of this type of patient, these researchers also recommend continuing research to better understand the other mechanisms underlying the relationship between smartphone abuse and anxiety and depression.

Some researchers have tried to propose solutions or interventions aimed at treating this other modern-day drug. This is the case of Salehan and Negahban (2013) who have suggested the use of techniques such as cognitive behavioural therapy and raising awareness of the problems associated with excessive smartphone use as effective ways of treating nomophobia.

In Turkey, drawing on the research of Yildirim and Correia (2015) Gezgin, D. (2013), attempted to analyse the prevalence of nomophobia among 475 high school students from several socio-economic backgrounds and six different schools.

The study, which was intended to be descriptive, found that secondary school students mainly use their smartphones for social networking, listening to music, general communication, taking photos, studying, researching, playing games and watching videos. The study also found above-average levels of nomophobic behaviour.

Furthermore, in terms of gender variance, the study reveals that girls have higher levels of nomophobia than boys. As for the length of time they use their mobile phones, girls also far outnumber boys.

No significant differences were found for variables such as 'school year', 'parents' level of education' and 'duration of mobile phone use'.

As for Yildirim and Correia (2015) themselves, they tried to measure nomophobia through a questionnaire administered to Turkish students. Their results showed that nomophobia has the following four dimensions: (1) inability to communicate; (2) loss of connectivity; (3) inability to access information; and (4) foregoing convenience. In this way, they hope to make their modest contribution to a better understanding of nomophobia and its impact on people's lives.

Also in Turkey, Güner, T. A., & Demir, İ. (2022) conducted a descriptive cross-sectional study of 970 high school students, the aim of which was to examine the effects of smartphone use on nomophobia, anxiety and self-control in high school students.

The results showed that respondents' smartphone addiction was above the average level of use. They also established that smartphone dependence had an effect on nomophobia, self-control and anxiety.

Finally, they add that teenagers are the group most likely to be addicted to nomophobia and that the solution was to reduce smartphone use to this age group.

King et al. (2014) notes that the prevalence of nomophobia is higher among young adult mobile phone users. As for the psychological effects, the authors classify them according to three aspects: (1) the amount of time the subject spends on their phone; (2) the level of attachment to their device and, finally (3) the impact of withdrawing from the phone. In the latter case, the subject is likely to experience stress if he fails to control the amount of time he spends away from his phone. We can therefore see that the intensity of the stress depends on the patient's ability to control the situation.

The solution to alleviate this stress is to allow nomophobic employees to use their phone during working hours or during meetings. By doing so, they will regain their confidence and feel that they have a social presence, which is a significant help to them.

African researchers have also studied the link between mobile phone addiction and academic performance. This is the case of Alhassan and Ademiluyi (2019), who looked at secondary school pupils in Nigeria. This study revealed a correlation between mobile phone addiction and poor academic performance. Indeed, the lowest marks were found to be those of the pupils most addicted to mobile phones.

These researchers have also found that the main reasons why pupils are addicted to mobile phones are the need for social interaction, entertainment and the search for information. This is why these researchers are insisting on a collective awareness of the dangers of mobile phone addiction, while suggesting that parents, teachers and school heads develop strategies to help their pupils reduce their use of mobile phones.

In Côte d'Ivoire, Koffi et al. (2019) studied the prevalence and factors associated with nomophobia (the fear of being without a mobile phone). They surveyed a sample of students and found that 65.7% had symptoms of nomophobia. The study also found that age, gender and frequency of mobile phone use were significant predictors of nomophobia, with younger students, females and those who used their mobile phones more frequently being more likely to suffer from nomophobia. The authors suggest that interventions to prevent or treat nomophobia should take into account individual differences in demographic factors and mobile phone use

patterns. They also recommend further research to better understand the cultural and contextual factors that contribute to nomophobia in Côte d'Ivoire and other African countries.

In Côte d'Ivoire, fathers and mothers have set up their own school system, known as 'École des familles', to protect their children from the new drugs resulting from the uncontrollable use of smartphones. In this school, mobile phones and other connected devices are strictly forbidden.

The 'École des familles' is a resounding success, having been declared the best school in Côte d'Ivoire for five years running, with 100% of pupils admitted each year. Faced with this great and undeniable success, parents, partners of the 'École des familles', and all the staff had every right to expect to have achieved all the initial objectives, which included the school being a continuation of the education that began at home, an education that is at once religious, social, personalised, of high quality and innovative, with trusted tutors and children worthy of being brought up according to the 'Prelature of Opus Dei'.

Paradoxically, instead of this noble expectation, a recent study by Ettien & Amian (2023) reveals that some of these hard-working children, who appear docile, irreproachable and respectful of instructions, lead a double life. Indeed, far from the accusing eyes of adults, some of these children are either actors or victims of sexual violence in their lives on the Internet, raising fears of the prevalence of nomophobia in this school!

Research questions :

At this stage we present the central question and the secondary research questions.

Central research question :

How can you understand suspicions of nomophobia in an environment such as the 'École des familles' where pupils are supposed to be banned from using connected devices?

Secondary research questions :

How prevalent is nomophobia in 'École des familles'?

How does this pathological dependence on mobile phones manifest itself in young people at ?

What are the risk factors for this school if nothing is done?

How can these new pathologies be incorporated into the education policies of today and tomorrow?

General objective:

This study aims to understand the existence of nomophobia at the 'École des familles'.

Specific objectives :

explain the prevalence of nomophobia at the 'École des familles';

describe the manifestations of nomophobia at the 'École des familles';

cite risk factors at school families;

integrate these new pathologies into current and future education policies.

II. METHODOLOGY

We opted for a presentation of the study site, the population, the sample, the data collection methods, techniques and tools, and finally the data processing methods, techniques and tools.

Presentation of the site:

The 'École des familles' is located in Abatta, in the commune of Bingerville. It covers an area of 3.5 hectares and comprises two buildings: buildings A and B, which together house classrooms, two preceptor rooms, a computer room under the teacher's control, offices, a library and a chapel. Although the school has been in existence since 2006, the current site has only existed since 2013.

From 2018 to July 2023, the families' schools will be consecutively ranked as the best schools in Côte d'Ivoire, with 100% of pupils passing the national examinations - the CEPE, BEPC and the baccalaureate.

Presentation of the study population and sample :

The population is made up of 561 pupils, 36 preceptors and 410 families, giving a total population of 1007. Our sample consisted of 95 upper secondary students, 50 of whom were girls. The respondents are all smartphone owners and users.

Data collection methods, techniques and tools:

The data was collected by means of an anonymous questionnaire sent to pupils. This study on the existence of nomophobia is therefore essentially quantitative.

Data processing methods, techniques and tools :

The data from this study was processed into a descriptive analysis based on the responses to the questionnaire. As for the technique, we simply performed a flat sort using Excel 2016.

Reference theory :

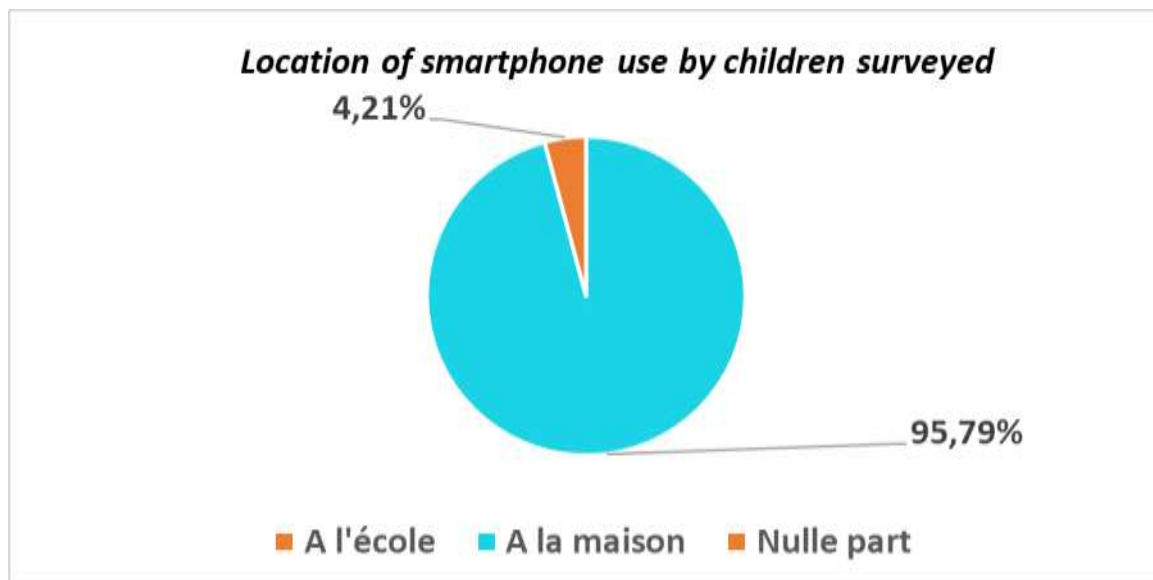
To explain the phenomenon under study, Bowlby, J.'s (1978) theory of attachment seems to us to be the most appropriate. This is a psychological approach that emphasises the importance of early relationships between a child and its attachment figures, generally its parents, and its impact on the child's long-term emotional and social development. Successful attachment fosters self-confidence, autonomy and healthy relationships with others, whereas poor attachment experiences can lead to emotional and social problems in adulthood.

III. RESULTS :

In more or less detail, the results are more or less as follows:

Graph 1: Location of smartphone use.

At school	0.00%
At home	95.79%
Nowhere	4.21%



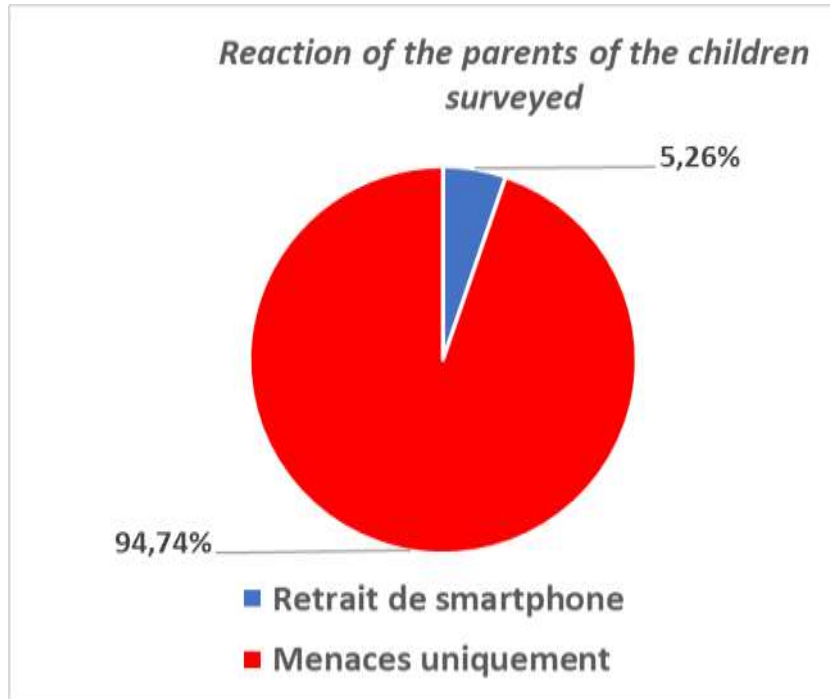
Source: ETTIEN Assoa 2023

Commentary:

It appears that telephones are not permitted in this school. However, it is widely permitted to use it at home (95.79% of the pupils surveyed). Children mainly use it at home. There are no restrictions to maintain the same approach to the phone and the level of concentration required at school.

Graph2: Experience of prior withdrawal of a mobile phone.

Smartphone withdrawal	5.26%
Threats only	94.74%



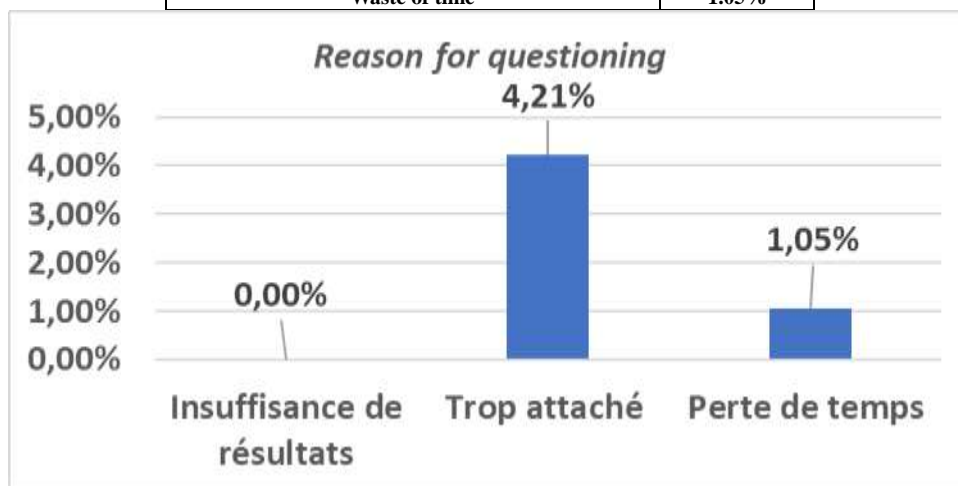
Source: ETTIEN Assoa 2023

Commentary:

Parents are sensitive to a form of addition to which their children are subject (100% of children have been threatened at least once), even though only 5.26% of them have been deprived of their smartphones at the time of the survey. All these children have a smartphone. This suggests that they come from a fairly well-off socio-economic background.

Graph2: reasons for removing the mobile phone.

Insufficient results	0.00%
Too attached	4.21%
Waste of time	1.05%



Source: ETTIEN Assoa 2023

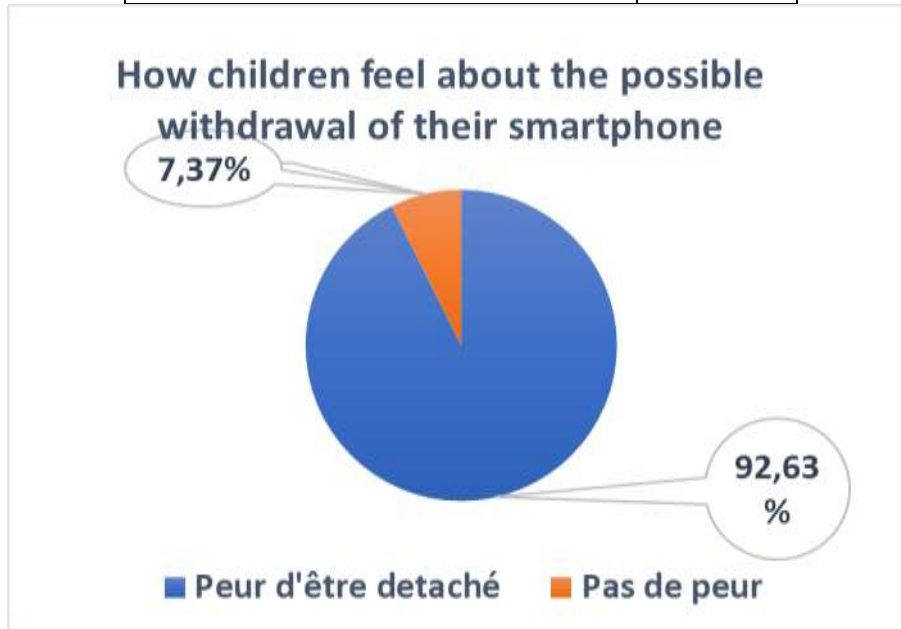
Commentary:

Curiously, the students surveyed were not called out for underachieving. However, some were questioned for being too attached to the telephone (4.21%). This means that 5.26% of the 95 students were actually being questioned because they were wasting a lot of time on their phones instead of devoting themselves to their work, even though they were already achieving good results. It's also a sign of their parents'

involvement in their studies at home. Incessant questioning is proving its worth, as very few of these children are deeply attached to their smartphones, even if they have them.

Graph 4: Fear of mobile phone withdrawal.

Fear of being separated from your mobile	92.63%
No	7.37%

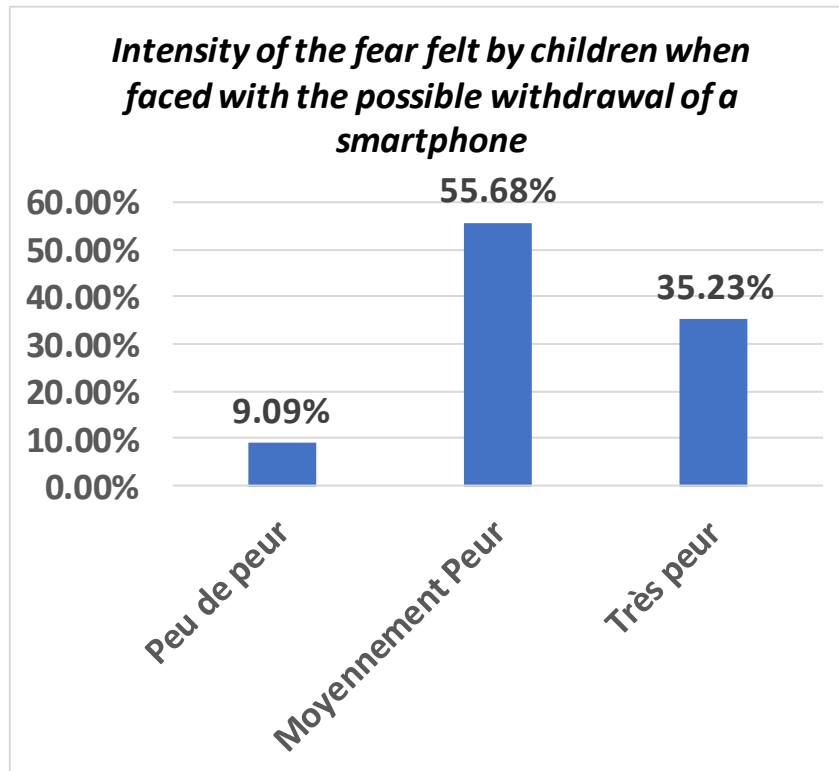


Source: ETTIEN Assoa 2023

We have no idea how much time they spend on their smartphones, on average, once they get home each day. But smartphones are still very important to these children, given that 92.63% (88 pupils) are afraid of being deprived of them.

Graph5: Intensity of the fear of removing the mobile phone.

Little fear	9.09%
Moderately afraid	55.68%
Very scared	35.23%



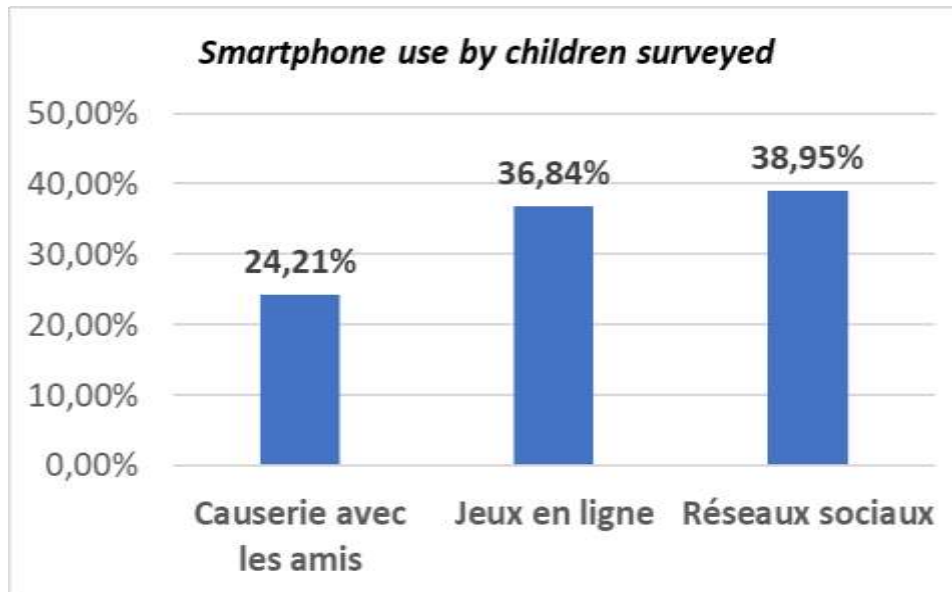
Source: ETTIEN Assoa 2023

Commentary:

35.25% of children are really very afraid. We can see a real tendency towards nomophobia in the sample surveyed. Mechanisms certainly need to be put in place to reduce the prevalence rate, which is still 92.63%, with varying rates of suspected nomophobia in the three groups highlighted.

Graph 6: Telephone use.

Chatting with friends	24.21%
Online games	36.84%
Social networks	38.95%



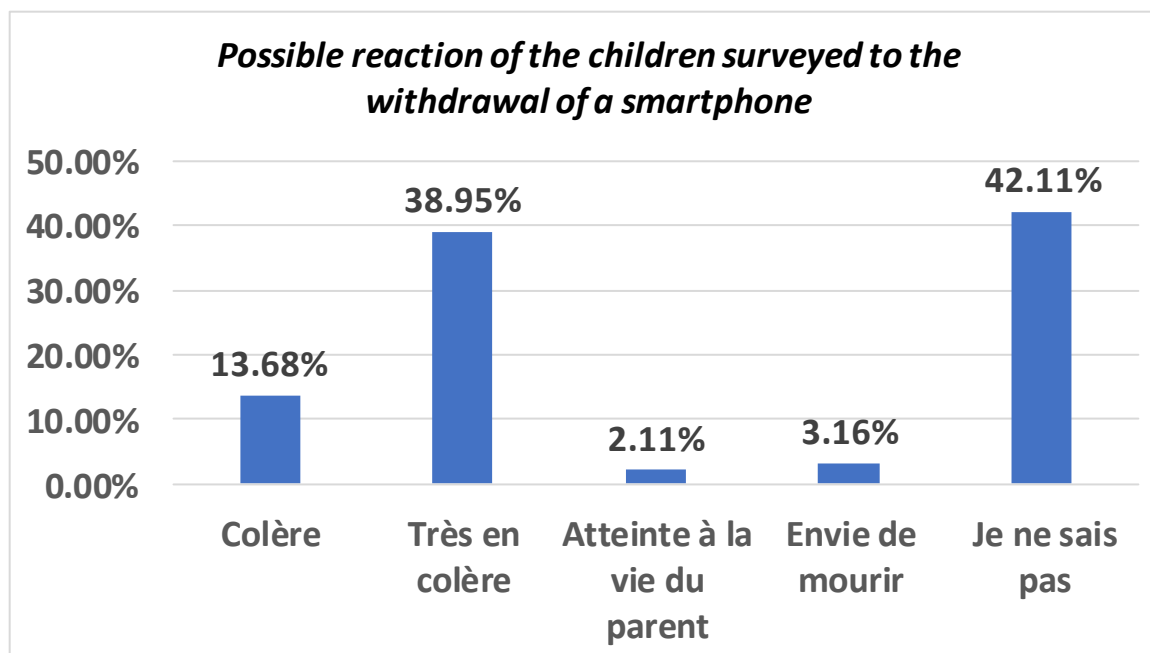
Source: ETTIEN Assoa 2023

Commentary:

The pupils surveyed spend more time on social networks (38.95%) among them are concerned; 36.84% for online games and 24.21% for chatting with friends. These three factors are robust enough to explain a large part of their influence on the pupils surveyed. However, these factors are not independent. They are not exclusive in reality and are difficult to understand without a prospective study with a large sample to understand the net effect of the confounding factors that abound in these three factors of regression of incipient or established nomophobia in these children. These factors, hidden beneath the three factors of evidence, are potentially fraught with risk; given that it is impossible to imagine what might be involved in the talks that are so addictive that people are so afraid of being rid of their mobile phone. Potentially high-risk factors. Games are just as addictive, as are social networks, which offer a series of sequences to consult, and you need strength of character to revel in them.

Graph7: feelings when the mobile phone is withdrawn.

Anger	13.68%
Very angry	38.95%
Damage to the parent's life	2.11%
The desire to die	3.16%
I don't know	42.11%



Source: ETTIEN Assoa 2023

Commentary:

Some of the children above say that they are not afraid of being deprived of their smartphone. However, here they find themselves unknowingly saying that they would at least get angry. However, this bias should not be underestimated, given that 2.11% of them admit to being capable of ending their parents' lives if they were taken away. There is a more significant neurosis emerging in this sample, which calls for monitoring and questioning of the parents themselves, who should perhaps take a closer look at the approach to the telephone as perceived by the formal school up to a certain age, and see to what extent they can assist this use of mobile phones.

However, in the light of the data collected, it remains to be seen whether gender has an impact on the prevalence of nomophobia in this sample. In other words: So, what part does gender play in explaining nomophobia?

IV. DISCUSSION OF THE RESULTS:

Our results highlight the definition of nomophobia, which is an exaggerated fear of being separated from one's phone. Here, we note the existence of this great fear in 29.55% of girls and 5.68% of boys, i.e. a prevalence of 35.23% of respondents, compared to Koffi et al. (2019) with the prevalence of 65.7%. This difference could be explained by the fact that at the school for families, we have parents and pupils from a certain rather well-off social category who are regularly made aware of the prevention of new pathologies linked to the use of digital technology.

Nomophobia is also associated with nervousness and fear, and our results show that 38.95% of respondents, including 8.42% of boys and 30.53% of girls, would feel nervous if they were deprived of their smartphone. It should also be noted that girls are more likely to be affected by nomophobia than boys.

With regard to the manifestations of nomophobia in Côte d'Ivoire, our results are at odds with those of Alhassan and Ademiluyi (2019) who found a correlation between mobile phone addiction and poor school performance. At the 'École des familles', dependence on the telephone does not prevent pupils from achieving the success known to all! Is this not due to the personalised monitoring of children by both parents at home and tutors at school?

As is the case everywhere else, students with nomophobic tendencies are afraid of being separated from their mobile phones, but what's special about this study is that this fear is not followed by active aggression in the majority of respondents.

It should be noted, however, that this aggression does exist among 2.11% of respondents, who would go so far as to threaten their parents' lives if their parents deprived them of their mobile phone.

Also, 3.16% of these same children say that taking away their phone would be tantamount to preferring death. We dare to believe that this is simply verbal aggression expressed in the figurative sense. Otherwise,

what do these children make of maternal love? What meaning do they give to paternal love, if the simple deprivation of a telephone is enough to make an attempt on their parents' lives, or to want to die?

These two questions raise the effectiveness of the risk factors for nomophobia in Côte d'Ivoire. The problem of nomophobia goes deeper than we think, and Bowlby's (1978) theory of attachment seems to provide one of the best explanations of the question raised.

Indeed, the importance of early relationships between children and their attachment figures, their parents, is well known. Bowlby teaches us that the quality of this attachment to parents plays a crucial role in the child's long-term emotional and social development.

When children establish a secure attachment with their parents, they develop self-confidence, autonomy and the ability to establish healthy relationships with others. Attachment theory also highlights children's fundamental need to be close to their attachment figures and to feel secure, especially in stressful situations.

In this study, attachment to parents gave way to attachment to the mobile phone, to the point where simple deprivation would entail the risk of murdering the parents, who are supposed to be deeply loved. In terms of their attachment to their smartphone, children are no longer close to their parents. Instead, they are close to their mobile phone. They are no longer safe with their parents, who are likely to do them the greatest harm by depriving them of their mobile phone.

Taken literally, it is even ready to die if deprived of a mobile phone! That's why it's more than ever time to incorporate these new pathologies into the education policies of today and tomorrow, so that the future of humanity, which is our youth, does not take irreparable turns for the family!

V. CONCLUSION:

The aim of this study was to examine the presence of nomophobia in schools in Côte d'Ivoire. To achieve this objective, we conducted an anonymous questionnaire survey of 95 pupils using ordiphones, including 50 girls and 45 boys from 'École des familles'. The data were subjected to descriptive analysis and processed using Excel 2016.

The results show that 95.79% of students use their mobile phone at home, while 4.21% use it elsewhere. What's more, 5.26% of respondents, all boys, have had their phones confiscated by their parents, while 94.74% have been threatened with confiscation because of excessive attachment to their mobile or time wasting. As a result, 92.63% of students live in constant fear of having their phone confiscated. Of these, 35.23% have an excessive fear of being separated from their smartphone, which qualifies them as nomophobes.

The study also revealed that in their free time, students use their mobile phones to chat with friends (24.21%), play online video games (36.84%) and use social networks (38.95%). If their phone were confiscated, the respondents would react in different ways: some would be angry (13.68%), others very angry (38.95%), while some might consider more serious actions, such as harming the life of the parent responsible for the confiscation (2.11%) or even preferring to die (3.16%). However, 42.11% said they did not know how they would react.

In terms of gender, girls are more addicted to mobile phones (50.53%) than boys (45.26%) and, as a result, are more likely to be threatened with confiscation (52.63% compared to 42.11% for boys). So, we can say that our results confirm the presence of nomophobia in schools in Côte d'Ivoire, with a prevalence rate of 35.23%!

Using your smartphone is like having a delicious meal brought to you just when you're hungry - very hungry, in fact! You gladly accept it and, as you indulge, your desire to consume it increases to the point where it imprints its delicious taste on you, encouraging you to ask for more in the days, months and years to come.

Like a drug, this delicacy attracts consumers of all ages. Attachment to a mobile phone takes the malicious pleasure of momentarily replacing attachment to a husband or wife, mother or father. We are not necessarily aware of it until we realise how frustrating it is for the other person! For example, a wife who is addicted to her mobile phone may spend an hour or even two entertaining herself alone on her laptop, at a time when her partner is waiting for her to go to bed so that she can give him a tender hug. What a frustration!

Wouldn't it be the same for a mother who learns that her own son could strike her a fatal blow by 'simply depriving' her of the mobile phone she gave him as a sign of love, unaware that the tender son's attachment to her has long since turned into an attachment to an object: the mobile phone!

Perhaps it is too risky to assert that attachment to the smartphone is at the root of nomophobia. In fact, it is because people become progressively attached to their smartphone that they are afraid to be separated from it.

The merit of this study is that it highlights the danger that attachment to the smartphone represents for the family and social equilibrium. What will become of humanity if attachment to the telephone tends to take precedence over the attachment of a son to his mother, or a daughter to her father? Who or what will be the benchmark for future generations?

The battle seems soon to be lost, because how many of us would wait patiently for a few days, weeks or even months before having our mobile phone repaired or replaced if it suddenly broke down? Would it be an exaggeration to say that we are all potentially nomophobic, given our attachment to our smartphones?

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